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RED IMPORTED FIRE ANTS: DAMAGE TO CORN IN THE FIELD AND GREENHOUSE

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In field tests conducted in 1980 field corn was grown in plots 4 rows wide by 30 feet long on land containing red imported fire ants, Solenopsis invicta Buren, and on adjoining land which was treated with Mirex bait to control fire ants. The mean number of corn plants per meter of row was 5.8 and 1.8 in the plots without ants and with ants, respectively. The yield of ear corn was 1856 Kg/ha and 354 Kg/ha, respectively.

In greenhouse tests corn was grown in soil bins without fire ants, with fire ants which were fed a laboratory diet, work with fire ants which were not fed. The results were: percentage germination 100, 47 and 69, respectively; plant height one week after planting seed 20 cm, 10 cm and 9 cm, respectively; and above ground plant weight (total per soil bin) 167 gm, 9 gm and 2 gm, respectively.

In greenhouse tests using corn plants injected with phosphorus-32 isotope fire ants were found to be feeding on the corn plant roots.

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